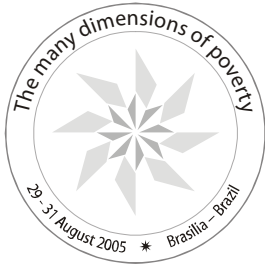


International Conference

The many dimensions of poverty

Brasilia, Brazil – 29-31 August 2005
Carlton Hotel



The Multidimensionality of Poverty: An Institutionalist Perspective

Conference paper

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International Conference ‘The Many Dimensions of Poverty’

**International Poverty Centre
United Nations Development Programme (UNDP)**

Brasilia, 29-31 August 2005

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Abstract

The multidimensionality of poverty is now a widely accepted concept. Among other possible dimensions, it includes income poverty, deprivation of capabilities (health, education) and social inclusion. It is argued that institutions and norms are constitutive of these dimensions and the relationships between them in two aspects. Firstly, institutions may determine achievements, levels and access to income, health and other dimensions. Secondly, institutions and norms are cognitive mechanisms. They both determine individual perceptions and result from them. They likewise determine mental models and behaviour regarding the capacity to escape poverty. Institutions and norms therefore contribute to the multidimensionality of poverty both directly and via cognitive processes, as the latter shape perceptions of poverty and social interactions, which themselves influence levels of poverty. Institutions create endogenous processes, i.e. collective mental representations that in turn induce stable institutions as well as poverty equilibria that retroact on individual cognition. The multidimensionality of poverty is examined at the outset. Concepts of institutions and norms are then analysed through the prism of the new institutional economics and evolutionary perspectives, institutions being themselves multidimensional phenomena. The indeterminacy of the effects of institutions on poverty is also emphasised, as institutions may be both inclusive and exclusionary. The causal processes going from poverty to institutions and from institutions to poverty highlight the possible endogenous processes and poverty traps, which may also create ‘cognitive institutional traps’.

Introduction

The multidimensionality of poverty is now a widely accepted concept in academia as well as in the donor community. As shown by one of its most famous theoreticians, Amartya Sen, dimensions of poverty not only include income-consumption poverty but also the deprivation of capabilities linked to health, education (mortality, undernourishment, illiteracy), and participation in the activities of the society. The latter involves several other notions, such as freedom, social inclusion, employment, dignity and human rights¹.

¹ Among numerous studies, Sen (1987, 1993, 1999a).

This paper argues that institutions and norms constitute pivotal causal elements in the levels, achievements, and stability of these dimensions and in the relationships between them. Institutions and norms are constitutive of these dimensions and in two aspects. Firstly, as emphasised by Sen, dimensions of poverty are dynamic phenomena, where each dimension may enter into a causal relationship with another one. Institutions and norms may determine the levels of several dimensions of poverty (income, health, education) and the relationships between them, with institutions constituting a ‘hub’ for these dimensions. According to Sen’s analysis, for a given individual institutions and norms determine processes (for example violation of rights) as well as opportunities to achieve (for example a better health). The institutional environment ‘filters’ access to higher income, better health, the exercise of rights, and so on. Moreover, institutions are themselves multidimensional and composite phenomena; they include both ‘forms’ and ‘contents’, which multiplies the possible causalities involving institutions and the various dimensions of poverty. Causalities function both ways, from institutions to poverty from poverty to institutions, which generates endogenous processes and possible poverty traps, or ‘institutional poverty traps’.

Secondly, institutions and norms both determine and result from individual perceptions, mental models, preferences, expectations and behaviour regarding the desire, the capacity and the strategies for escaping poverty: for example, cooperation, the pursuit of self-interest, or self-exclusion from the society’s activities – such as the hopelessness created by discriminative norms and institutions, as analysed by Loury². Institutions and norms are cognitive mechanisms that generate in individuals’ minds beliefs about states of the world, the beliefs of others and the behaviour that is appropriate to these states of the world.

Institutions and norms therefore contribute to the multidimensionality of poverty both directly (in shaping levels and access to, for example, income opportunities or educational infrastructures) and via cognitive processes (which for a given individual shape perceptions of the various dimensions of poverty, as well as of the behaviour and types of social interactions that would improve the levels achieved in the various dimensions, for example collective action, cooperation). Institutions and norms create endogenous and feedback processes. These processes involve collective (shared) and normative mental representations that in turn stabilise institutions and norms and poverty equilibria that retroact on individual cognition. This may generate ‘cognitive institutional traps’.

The impact of institutions on poverty has already been highlighted in the literature. Institutions, however, have not been analysed as determinants of the multidimensionality of poverty, with mental processes being themselves involved in the emergence and impact of institutions.

The paper is thus divided as follows. Section 1 discusses the multidimensionality of poverty, highlighting the crucial role of institutions in determining the level of each dimension, such as income, human development, participation in society. It also emphasises the role of institutions in the discontinuity between dimensions. Section 2 defines institutions and norms according to the new institutional economics perspective, as well as cognitive and evolutionary approaches. It demonstrates that institutions are *per se* multidimensional and composite phenomena, which multiplies the causal paths involving institutions and the dimensions of poverty. Section 3 examines the ex ante indeterminacy of the effects of dimensions of institutions on the dimensions of poverty – for example, reducing or aggravating, generating exclusion or cooperation and inclusion. Section 4 presents the institutional causal mechanisms that underlie the multidimensionality of poverty, i.e. the causal processes going from poverty to institutions and in turn from institutions to poverty. It highlights possible endogenous processes and poverty traps. The cognitive dimensions of institutions may generate ‘cognitive institutional traps’.

² Loury (1999).

through causal processes that go from mental representations to institutions, then to poverty, and finally back to norms and mental representations.

1. The multidimensionality of poverty: institutions as determinants of dimensions

The multidimensionality of poverty: the key role of institutions and norms

The multidimensionality of poverty is now the subject of a large literature, with Amartya Sen being among its best-known theoreticians, and has given rise to many debates as to its methods of measurement³. Poverty reduction refers to the improvement of the well-being of poor people, i.e. to the lives and ways poor people live, and to what they can or cannot do⁴. For Sen, well-being encompasses income-consumption, human development, health, adequate nutrition, shelter, and participation of the individual in society (and with dignity). As is well-known, Sen distinguishes, in regard to the concept of well-being, functionings (the achievements, what the people actually live with) and capabilities (the ability to achieve and the freedom that individuals have in their choices). Well-being thus explicitly includes a concept of active participation and benefits in economic and social activities.

Poverty as a concept and percept is a multidimensional phenomenon that cannot be reduced to income-consumption poverty. In the first place, institutional conditions constitute determinants of the multidimensionality of poverty, i.e. for a given individual, of the levels and repartition of the various dimensions (institutions being a 'hub' for these dimensions). Obviously, there are relationships between dimensions of poverty that are not channelled by institutions. Health may impact on education without involving institutions: for example, at the individual level, health has a positive effect on education (on school attainments⁵). It is the institutional environment, however, that distributes the various dimensions in regard to specific market conditions. Income poverty is determined by access to markets and resources and to public institutions, both as an individual condition (such as health and education) and as a capacity to have access to the institutions that regulate, for example, health and education. Social status, respect from others and 'dignity' are obviously determined by institutions and norms. Institutions are devices that govern the conversion between resources and outcomes (well-being) and their degree of equality or inequality, or, in Sen's words, the equality of functionings⁶.

Secondly, the causal role of institutions and norms involves two kinds of processes. It involves mental processes (that govern individual minds, behaviour and social interactions) as well as institutional processes (that govern social interactions and societies), which retroact on each other. The causal processes and directions of causalities are often confused in the literature, because of the difficulty in conducting analyses both in the perspective of methodological individualism and collective behaviour. Fully participating in society with dignity and inclusion are mental processes and perceptions as well as objective facts that can be measured and allow for the building of indicators.

The role of institutions in poverty as already been highlighted in the literature. For example, Sen elaborated the concepts of relational features in deprivation, of entitlements to and rights to have access to types of exchanges and resources. He showed the importance of 'social arrangements' in shaping what individuals can be and can do⁷. 'Relational deprivations' have an importance

³ Thorbecke (2004); correlations between dimensions, e.g. income, human development, empowerment, subjective well-being are examined in McGillivray (2005).

⁴ Kakwani and Pernia (2000).

⁵ Behrman and Rosenzweig (2001).

⁶ Issues long discussed in welfare economics, see Moreno-Terner and Roemer (2005), Sen (1992).

⁷ Sen (1999a).

that is either constitutive or instrumental (not impoverishing in themselves but having consequences that cause impoverishment, for example being deprived from access to credit markets or to land). Sen also noted the ambiguous effects of the dynamics of institutions on the different dimensions of poverty, for example, labour market institutions. One of his well-known examples is the difference between the French and the US institutional devices for dealing with unemployment: these complex effects underline the difficulty of comparing institutions, for example, in assessing the relative fairness of a high level of protection but with long periods of unemployment versus lesser protection but with greater mobility and shorter unemployment⁸.

Institutions mediate the relationships between dimensions of poverty in either direct or indirect ways. The relationships may be indirect. For a given individual, institutions regulate the preliminary rights of access to a dimension (by gender, social group, situation in the household, individual characteristics). Institutions determine which individuals may claim access to a dispensary, medical treatment or school enrolment. Institutions also directly govern the dimensions of poverty, i.e. they determine their existence and levels in a society (the choices for social protection or efficient health systems, the existence and levels of human rights, and so on). The causal role of institutions also involves markets at the macro and micro levels. The dimensions of poverty are determined both by market conditions and institutional conditions, as in the case of institutions that increase returns to scale and generate cumulative causation processes⁹.

Institutions and norms relate to an important aspect of the multidimensionality of poverty, i.e. the complex linkages between absolute and relative poverty, and exclusion at both the individual level and the aggregate level. Atkinson and Bourguignon¹⁰ defined poverty as an ‘inadequate command over economic resources’, with the ultimate goal of ensuring capabilities that allow individuals to achieve a particular set of functionings. Once basic needs are satisfied, poverty is governed by perceptions, such as the individual perception of well-being relative to the well-being of others, by inclusion in markets (such as labour markets) and institutions (economic, political, social) of a society, and therefore also by social norms. Atkinson and Bourguignon linked relative (exclusion) and absolute poverty at the individual and world levels (developed and developing countries) as ‘two dimensions of the same capability space’. Dimensions of poverty therefore imply an assessment of priorities, a hierarchy, and a lexicographic sequence: absolute poverty (basic needs) then relative poverty. Both relative and absolute poverty are generated by institutions that vary according to societies, but dimensions may be prioritised within a given society according to poverty reduction criteria and therefore the reform of specific institutions (such as the institutions that induce social and political inequality)¹¹.

Discontinuities between dimensions

Relationships between dimensions are not linear, and an improvement (deterioration) in a dimension does not imply an improvement (deterioration) in another dimension. Many elements stemming from contexts — economic environment, political, household institutions — or from individual characteristics may break the relationships. There are discontinuities between the dimensions because they involve heterogeneous levels: the epistemological (are the dimensions commensurable?), economic, individual and cognitive, and the level of social interactions. As shown by the literature on traps and cumulative causation, there may be a congruence between

⁸ Sen (1999b).

⁹ Burgess and Venables (2003).

¹⁰ Atkinson and Bourguignon (1999).

¹¹ A key issue of welfare economics, in particular that of how to specify social weights; see Essama-Nssah (2004).

dimensions (for example, low income, low social status, low level of education and skills, low participation in the state institutions and citizenship, social exclusion), as well as discrepancies. Discontinuities between dimensions, between income and well-being, may be created by the institutional environment of individuals (institutions, norms, values, affiliations, memberships, occupations, statuses and their various determinants, which stem from birth or are acquired); all these factors may be endogenous to each other.

The discrepancies between the dimensions of income and human development are the subject of a large literature, for example on the role of public policies, provision of public goods and equalisation of access to basic amenities for all citizens¹². It was popularised by Sen in his analyses of the contrast between human deprivation affecting African-Americans within a rich country (the US) and the high level of human development in a poorer region (such as Kerala). Globalisation adds new examples of discrepancies, as it often induces changes in the returns of occupations. In India for example, lower caste girls were traditionally not the objects of strong expectations in terms of participation in the labour markets. This resulted in fine in a greater degree of freedom than men vis-à-vis the occupations linked to their social status. They finally benefited more from the opportunities of globalisation (English schools, internet economy) and increased their incomes¹³.

The discrepancy between dimensions of income and social norms and statuses may thus be 'objective': institutions and norms may work in different directions than income (income poor with high social status; wealthy individuals with a low social status). Gaps between dimensions are therefore not reduced to the gaps between subjective and objective approaches of poverty.

Discrepancies between dimensions, however, are also generated by the perceptions of poverty and well-being¹⁴. As is well-known, the relationships between indicators of dimensions of income-consumption and well-being may be weak¹⁵. Individuals are heterogeneous in their perceptions, tastes and preferences. These discontinuities or indirect relationships between dimensions are examined by the economic literature on happiness, at the individual level as well as the aggregate level. After the fulfilment of basic needs, the relationships between 'happiness' and income tend to weaken and stem from relative, not absolute wealth¹⁶. 'Happiness' and well-being are both subjective and objective. Wealth and happiness are relative. They are perceptions shaped by norms and institutions (for example, honour, relative statuses), while norms are themselves the outcomes of mental perceptions that are shared by other individuals. There are various causes for concern for relative status and ranks – for example, evolutionary outcomes in human societies, social arrangements associated with market imperfections¹⁷. Norms, on which judgments of well-being are based, seem to increase in the same proportion as the overall income¹⁸. For Frey and Stutzer¹⁹, the determinants of happiness include institutions in addition to factors such as personality and socio-demographic and economic contexts²⁰.

¹² For example the debate on the role of provision of public services and goods (in particular public health spending), Anand and Ravallion (1993).

¹³ Munshi and Rosenzweig (2003).

¹⁴ The 'Leyden school', for example the studies by Aldi Hagenaars, or Bernard van Praag.

¹⁵ On the example of Mexico, Rojas (2004).

¹⁶ Kenny (1999).

¹⁷ On preferences for conformism, Postlewaite (1998).

¹⁸ Easterlin (1995).

¹⁹ Frey and Stutzer (2000 and 2002).

²⁰ On the example of Switzerland, Frey and Stutzer show that participation rights, direct political participation and political decentralisation have positive effects on well-being.

2. Institutions and norms as multidimensional phenomena

Perspectives from new institutional economics: from characteristics of institutions to economic outcomes

Defining institutions is a matter of intense debate, as institutions refer to different domains: market, non market, state, economic, social, and political, among others (market exchange, democracy, institutions governing inheritance, marriage, and the like). Institutions are often equated with rules and norms, though these three concepts are distinct. Social norms and rules are sometimes contrasted with official rules (for example, associated with a court, a legislature, or enforced by law)²¹. Institutions may be defined as sets of both official and social rules and norms.

Economics early on recognised institutions as key determinants of economic activity. This was particularly the case in the first half of the 20th century (the ‘old institutionalism’ elaborated by Thorstein Veblen, among others) but the concept became progressively marginalised within the neoclassical paradigm. It was reactivated in the 1970s thanks to the new institutional economics theories. The definitions of institutions coined by North are now canonical. Institutions are ‘the rules of the game in a society’; they are ‘the humanly devised constraints that shape human interaction’²². Institutions consist of ‘informal constraints (sanctions, taboos, customs, traditions, and codes of conduct) and formal rules (constitutions, laws, property rights)’²³. They ‘structure incentives in human exchange, whether political, social or economic’²⁴. Institutions affect economic performance by their effects on the costs of exchange and production. Costs here are a key concept and together with technology institutions determine transaction and transformation (production) costs. Transaction costs vary depending on types of property rights. The costliness of information is the cause of the costs of transacting, i.e. costs of measuring what is exchanged, costs of protecting rights and enforcing agreements. These costs are for North ‘the sources’ of social, political, and economic institutions²⁵. The main function of institutions is to ‘reduce uncertainty by establishing a stable (but not necessarily efficient) structure to human interaction’²⁶. For North, institutional change is incremental rather than discontinuous.

For the new institutional economics, institutions are rules characterised by enforcement and norms of behaviour that structure repeated human interaction. Institutions—for example, constitutions, common laws, or contracts—specify in formal terms the rules of the game, from the most general constitutional ones to the specific terms of a particular exchange. North extensively uses the (questionable) formal-informal distinction and equates norms with informal constraints: norms are ‘informal constraints on behaviour that are in part derivative of formal rules’, they are extensions of formal rules²⁷. For North, institutions are the rules of the game. They are to be distinguished from organisations (‘the players’).

The concept of institutions as rules of the game, or as an equilibrium outcome of a game, has been explored by Aoki along with the issue of enforcement²⁸: i.e., the endogenous generation of rules of the game and their self-enforcing character via the interactions between individuals (how enforcing is the enforcer). Institutions are interdependent: as with game-theoretic models, solutions and equilibria are multiple and institutional change is the selection of one equilibrium

²¹ Posner (1997).

²² North (1990, p.3).

²³ North (1991, p. 97).

²⁴ North (1990, p. 3).

²⁵ North (1990, p. 27).

²⁶ North (1990, p. 6).

²⁷ North (1989).

²⁸ Aoki (2001).

from many possible ones, which may be sub-optimal. The focus on enforcement leads to analysing the design of institutions that can implement given social goals in a manner that is compatible with the incentives of the players for a certain class of environment, according to a mechanism that is self-enforceable or supplemented by an enforcement mechanism²⁹.

In North's view, institutions allow one to understand the determinants of growth and the divergence between societies and countries. Determinants of economic growth emerge from the tradeoffs between, on the one hand, low transaction costs in small-scale peasant societies but with limited division of labour and high production costs, and, on the other, economies of scale in market societies, which stem from specialisation but generate high transaction costs and opportunities for free-riding.

Understanding the modalities and conditions of rules enforcement is therefore crucial, as institutions have been defined as self-enforcing devices. Institutions and norms may be self-enforcing or enforced by an external party given the environment, as shown by North, Weingast, Greif with the example of merchant institutions, and in particular by Greif in his well-known studies of medieval Maghribi and Genoese traders and the contrast between 'collectivist' and 'individualist' institutions. The latter institutions provided examples of specific groups that developed markets through the creation of new economic institutions (business associations, 'coalitions', guilds). These institutions prevented opportunism via multilateral reputational devices (punishment of cheaters by other parties than the cheated) and credible commitments, coordination and enforcement mechanisms³⁰. Thanks to these mechanisms, impersonal exchanges are effective in the absence of legal systems guaranteed by a state³¹. In combination with the external environment, these mechanisms generated norms and incentives for collective action and sanctions. In the neoinstitutionalist perspective, these types of institutions have been crucial factors of economic growth.

Institutions may be distinguished according to several criteria. An important distinction separates institutions associated with transaction costs and exchange and addressing coordination failures from a second category of institutions that protect property rights. Other types of rights may be considered, in particular political rights (democracy), given their importance in explaining the variations in income and human development levels in developing countries³². Property rights institutions have indeed been at the foundation of the neoinstitutionalist economic approach of institutions since Coase³³. The latter, as is well-known, demonstrated that externalities may be internalised through negotiation if property rights are well established and if there are no transaction costs. The distributive outcomes here depend, however, on the initial allocation of property rights. The presence of transaction costs makes it so that different systems of property rights induce outcomes with variable degrees of efficiency. The usual view of neoinstitutional economics is that private property rights create security, hence investment, therefore foster growth and are instruments for poverty reduction. The conceptual framework of property rights allows one to explain economic growth, in particular as the historical shift from rights over individuals (instituted, for example, by kinship systems, or slavery) to rights over goods³⁴.

²⁹ Aoki (2001, p. 6).

³⁰ Among many studies, Greif (1989), Greif et al. (1994).

³¹ Greif (1997) on 'community responsibility'.

³² Bardhan (2005, chap. 1).

³³ Coase (1960).

³⁴ Engerman (1973), an application on the case of Thailand is in Feeny (1989).

The emergence of cognitive theories of institutions

Explaining how and why individuals follow—or at least seem to follow—a rule is a complex problem that philosophers have long pondered³⁵. Cognitive anthropology and philosophy have provided concepts for the analysis of norms and institutions that are based on principles of cognitive economy rather than rational cooperation.

Institutions are mental representations. They are not concrete objects or actions, the latter being attributes of institutions. As shown by Sperber, they are rules governing representations or meta-representations that include a deontic dimension. When these representations include a deontic content (at the pragmatic level, i.e., obligation, prohibition, permission and so on), they are institutions that are internalised by a given group or society. In a non-cognitive perspective, Axelrod³⁶ also argued that meta-norms are necessary for norms to be stable: i.e. norms that punish those who do not punish non compliance with a norm, though this view has been criticised by Elster, as norms change and violation may remain unpunished³⁷. In Sperber's view, the mental representations that have the property to disseminate the most widely, to be the most widely shared, are the representations and norms which bring the largest cognitive gains for the least cost and effort. Contexts are essential for triggering understanding and behaviour: depending on the situation, specific inferences are triggered; specific types of information are more apt to be remembered, learned and disseminated. Because of their specific structure, some representations and ideas are better disseminated and replicated than others³⁸: they are more 'relevant'³⁹.

The debate remains open regarding the mechanisms of transmission of mental representations and rules. The analogy with natural selection remains attractive and is supported by evolutionary approaches relying on the concepts of competition and selection. It was popularised by Dawkins with the concept of cultural 'memes', i.e. ideas and cultural units replicating by imitation from brains to brains. The controversy is ongoing in regard to the characteristics of evolutionary processes (stability, spreading, adoption of mental models) and their causal role in behaviour, social interactions, and emergence of obligations. Mental representations and behaviour may disseminate but not follow adaptive patterns of the type of natural selection. Contents of representations change during transmission, with no guarantee that they are identical in people's minds; an infinity of mental representations appears and disappears in individuals' minds in the course of social interactions. Mechanisms of dissemination, transmission and stabilisation of representations and norms seem to be caused by various context-dependent and psychological domain-specific factors, according to complex reasonings and inferences: for example the status of authority (political, educational, kinship-related) of the individual that conveys the content of norm, the credibility of the norm, the associated emotions, and so on.

In a different perspective, the evolutionary approach of institutions that was elaborated by Nelson and Winter⁴⁰, taking stock of the 'old institutionalism' (*à la* Veblen), also slightly diverged from the natural selection and evolutionary game-theoretic approach. Focusing on the role of history and technological change, it questioned the fact that institutions express equilibria. It highlighted as well the role of routines and their rapid and ceaseless change⁴¹.

³⁵ For example by Ludwig Wittgenstein, Willard V. O. Quine or Saül Kripke.

³⁶ Axelrod (1986).

³⁷ Elster (1989).

³⁸ Sperber (1985, 1990).

³⁹ This theory of relevance is explained in Sperber and Wilson (1986).

⁴⁰ Nelson and Winter (1982).

⁴¹ A review of the issues is in Hodgson (1999).

Functionalism permeates neoinstitutionalism and remains a matter of debate in cognitive approaches as well. Searle, for example, distinguishes between subjective and objective phenomena. He characterises institutions by their function, i.e. a collective acceptance and assignment of a status, so that a social fact becomes an institutional fact when the fact X counts as Y in a given context⁴². For Searle, if this procedure is regularised it becomes a rule that is constitutive of institutional structures, which constitutes behaviour and not only regulates it (regulative rules being ‘do this’, regulating activities existing independently of the rule). Searle calls these functions of institutions ‘status functions’, and considers them as constitutive of human societies. His view of the deontic dimension of institutions integrates the concept of power within cognitive approaches. This deontic dimension stems from the power that institutions allow, as expressed by the terms of rights, obligations, and permissions, which provide reasons (‘incentives’) for action that are independent of individual desires (‘preferences’, or tastes’).

Integrating cognitive approaches in the economic analyses of institutions

The central question of the new institutional economics is the relationship between institutions and level of development, or growth and poverty. It has progressively integrated micro, individual-centred and cognitive approaches, relying, for example, on concepts such as preferences and beliefs. Institutions indeed are not observable: what are observable are regularities of behaviour in individuals’ interactions, who are said to be a group when these individuals behave similarly. For Manski⁴³ for example, this similarity is explained by endogenous interactions (individual behaviour varies with the behaviour of the group) or by contexts that are exogenous to individuals, or by correlated effects (individuals have similar characteristics, or they are obliged by the same institutions). The classical assumption in economics that preferences are exogenous and a given has been relaxed by analyses of the mechanisms that shape these preferences and beliefs. The latter are increasingly conceived as psychological phenomena. Evolution is viewed as a key explanation for the resilience of, for example, egoism, self-interest, or kin-oriented altruism⁴⁴.

Institutions are increasingly analysed according to cognitive and dynamic approaches, as the outcomes of repeated interactions, exchanges reinforcing shared beliefs, such as identity and trust⁴⁵. Recent thinking on institutions has thus triggered a closer examination of social norms and beliefs. Norms are now viewed as foundational in economic activity, in particular in the action of exchange itself, and analysed through psychological concepts, such as rationality and preferences. As shown by Basu, norms may limit rationality, or change preferences, or help to select and stabilise an equilibrium (as conventions do)⁴⁶.

Similarly, in line with the view of institutions as outcomes of cognitive processes, North now conceives institutions as resulting from ‘mental models’, with mental processes, norms, behaviour and economic outcomes being endogenous to each other. For North, institutions are ultimately shaped by the ‘subjective perceptions’ of individuals to explain their environment, ‘which in turn determine explicit choices of formal rules’ and the evolution of norms⁴⁷. North increasingly adopted a cognitive perspective that focused on learning processes and their interaction with ‘common’ institutional and educational structures. According to an evolutionary theory of learning, North now posits the existence of ‘convergent mental models’,

⁴² Searle (2005).

⁴³ Manski (2000).

⁴⁴ As argued by Becker (1976).

⁴⁵ Kranton (1996), Akerlof and Kranton (2000), Ostrom (2000).

⁴⁶ Basu (2000, chap. 4).

⁴⁷ North (1997, p. 1).

shared beliefs and perceptions that derive from mental models⁴⁸. Social interaction implies and generates shared cognitive rules that provide a common framework for mutual understanding and interpreting perceptions and the environment ('shared mental models', 'common knowledge', 'implicit knowledge'). These models evolve with the evolution of societies and individual learning⁴⁹. Institutional dynamics are viewed as gradual or punctuated equilibria⁵⁰. According to North, the institutional framework consists of the political structure (that aggregates political choices), the property rights structure (that defines the formal economic incentives) and the social structure (norms and conventions that define informal incentives)⁵¹. Institutions are structures that individuals 'impose on reality' in order to produce a desired outcome. They are the external manifestation of beliefs systems that are the internal representation of this reality. Social norms ('informal') typically embody belief systems (still more than 'formal' ones).

Moreover, cognitive approaches have allowed for the understanding of the thresholds, the plurality of equilibria and traps that are generated by institutions. Threshold effects characterise collective behaviour according to the benefits or costs of imitating the others: similar preferences and agreed norms may generate different outcomes⁵². Non-linear models of collective behaviour have also been elaborated by studies that highlight positive and negative feedbacks in the acceptance of new technologies and the related locking-in processes⁵³. Collective action dynamics, and in particular the acceptance of a norm, depend on the distribution of individual thresholds of non-acceptance, which are determined by cost-benefits tradeoffs and perceptions of the number of individuals who are above the thresholds or are expected to be in the future. In these models, perceptions that most individuals accept a norm create negative feedbacks and a stable equilibrium, even if an individual does not want to follow this norm because of the high costs of opposing a (perceived) majority. Above a certain critical threshold of non-acceptance, positive feedback may occur. Such models show that small changes in perceptions may produce cascades of changes in perception and behaviour and hence new equilibria⁵⁴.

Beliefs have become central concepts and institutions are increasingly defined as equilibria of shared beliefs. For Aoki, an institution is 'a self-sustaining system of shared beliefs about a salient way in which the game is repeatedly played'⁵⁵. Institutions are repeated games and matching games regulated by mechanisms of transmission of information⁵⁶. Norms are self-enforcing patterns of behaviour, which solve coordination problems and constitute games equilibria (in various domains, property, statuses, contracts)⁵⁷. Game theory helped to understand the well-known coordination problems of the 'tragedy of the commons', of how the lack of coordination among individuals pursuing their own ends impinges on the well-being of others and leads to a decreased well-being of all, for example the exhaustion of a common resource (for instance via a classical prisoner's dilemma). Institutions here are the structures that govern these social strategic interactions between individuals, due to the fact they are bound by agreements (cooperative or non cooperative games). Institutions regulate problems of common interest and conflicts, either in solving problems or as distributional devices in enforcing claims.

⁴⁸ North (2005), see also see North (1996); Denzau and North (1994) on shared mental models.

⁴⁹ Mantzavinos (2001, section 2).

⁵⁰ See Fiori (2002) for a critical assessment of the different views hold by North.

⁵¹ North (2005, chap. 5, pp. 49sq).

⁵² See Granovetter (1978) on the examples of riots, strikes, voting or migration.

⁵³ Arthur (1989).

⁵⁴ Wood and Doan (2003).

⁵⁵ Aoki (2001, p. 10).

⁵⁶ Milgrom, North and Weingast (1990), or the many studies by Greif.

⁵⁷ Young (1998).

In a cognitive perspective, institutions and preferences evolve together (altruistic norms, for example). Bowles likewise defines institutions as the laws (central coercion), informal rules (social sanctions) or conventions (mutual expectations) that give a durable structure to social interactions among the members of a given group; they secure the conformity of behaviour and therefore may be represented as games or stable equilibria of underlying games, which explains institutional change⁵⁸.

The question of the origin and nature of institutions continues to be debated. In particular, Bowles has questioned the assumption of the contractual nature of social interactions that is assumed in neoclassical economics: many social interactions are obviously not contractual, especially in non market contexts and in markets with incomplete contracts, which are governed by power and social norms. For behavioural economics, individuals pursue their objectives and with their behaviour being governed by cognitive routines (past experience). Individuals adapt to situations and to the behaviour of others and the perception of it. Individuals are heterogeneous and, as argued by Bowles, their behaviour may be 'other-regarding', i.e. not governed by self-interest, improving the well-being of others at the expense of their own, and punishing those who violate ethical norms⁵⁹. This seems to be a universal trait of human societies: it is expressed in developing countries by many traditional institutions (for example punishment of deviating behaviour that destabilises social and institutional equilibria, sometimes qualified as 'witchcraft', which is indeed a device aimed at enforcing social norms).

The emerging fields of evolutionary economics, evolutionary game theory and evolutionary psychology reinforced the analyses of institutions and norms as cognitive phenomena. Evolutionary psychology has rooted itself in evolutionary biology⁶⁰. The institutions and rules that regulate economic interactions result from historical processes and human intentions, but for evolutionary psychology the 'rules of the game' are also structured by cognitive specialised devices that are the outcomes of long-term adaptation to particular problems. Sharing was a survival condition and hence an optimal rule for hunter-gatherers given the high uncertainty of their environment; it is less optimal if resources result from individual effort⁶¹. Rather than from economic maximisation, evolutionary psychology views human cognition as resulting from an adaptation that is characterised by the brain's modularity (executing routines and inferences that are adapted to specific domains and problem-solving)⁶². The evolutionary approach of institutions is thus advocated by evolutionary psychology, for which human minds developed adaptive problem-solving specialisation and therefore rules of behaviour and the associated institutions⁶³.

Institutions as intrinsically multidimensional

New institutional economics sometimes confuses institutions and attributes of institutions; institutions are defined as property rights and incentives, while the latter are also particular attributes of institutions. Likewise, institutions and policies are often endogenous, or viewed as synonymous⁶⁴. Similarly, the concepts of transaction costs or property rights cannot stand alone. In fact, institutions receive their mental content from their combination with the other existing institutions. Institutions are transformed by incentives that are provided by the existence of

⁵⁸ Bowles (2004b, chap. 1).

⁵⁹ Bowles (2004b).

⁶⁰ Among other studies, Tooby and Cosmides (1992).

⁶¹ Cosmides and Tooby (1994).

⁶² On the micro-foundations of institutions at the household level, Naudé (2005).

⁶³ Cosmides and Tooby (1994).

⁶⁴ Pritchett (2005).

other institutions and markets, with markets obviously being institutions. It is also other institutions that render an institution *de jure* or *de facto*.

A more rigorous theoretical approach must therefore disaggregate institutions: institutions themselves are multidimensional. Because institutions are among the determinants of the various dimensions of poverty, institutions multiply the causal processes according to their own dimensions. Institutions are themselves composite and multilayered devices. They are characterised by their various forms (names, organisations) and contents (mental representations, functions) that actualise in their linkages with the forms and contents of other institutions⁶⁵. Forms and contents of institutions are endogenous and shaped by other institutional forms and contents. Be they ‘formal or ‘informal’, all institutions exhibit forms and contents.

Forms differ from contents: for example, the forms of a contract, an institutionalised exchange, a right, or a political institution such as democracy may differ from their effective contents, i.e. the mental representations that are associated with the actualisations of social norms in daily interactions. Analogous distinctions have been made in the literature but in functionalist perspectives, i.e. in separating forms and functions. For example, the contrast between China and Russia in terms of growth has been explained by Rodrik by forms of property rights that exist but without their functions (Russia), versus functions that exist but do not correspond to formal institutions, such as guaranteeing investor’s rights (China)⁶⁶.

In this multidimensional view of institutions, contents include mental representations, with functions only being a consequence of these. Forms and contents may evolve separately and at different rhythms. Contents may follow forms or forms may follow contents. The form of an institution that is ‘filled’ in the course of history with progressively changing contents may finally disappear. Individuals and groups may ‘borrow’ the form of an institution and not its content, which may remain filled by the ‘traditional’ contents (for example market exchanges, labour contracts in the modern sector). Public or formal financial institutions may be ‘filled’ by the same representational contents that fill ‘traditional’ kinship rules. There are hierarchies and sequences: some institutions are conditional to the existence of others, and there are regularities of some institutional forms. In contrast, for functionalist approaches of evolutionary psychology, evolution solves adaptive problems and forms follow functions⁶⁷.

This conception of multidimensionality of poverty, with the dimension of institutions being itself multidimensional, reveals the limits of the measurement of institutions and the links between ‘institutions’ and ‘poverty’. The effects of institutions and norms on poverty depend on sets of mental representations and their relevance for individuals: the latter are composite phenomena, specific to individuals, and depend on contexts and types of interaction. These phenomena are difficult to predict *ex ante* and to measure. At the aggregate level, a large literature in the area of neoinstitutionalism reveals a variety of links between income growth and institutions, generally using cross-country regressions. The exact nature of the links and the direction of causalities are often inconclusive because of the inadequacy of the method⁶⁸. Controversies continue as to the primacy and the determinants of growth (the well-known debates on the role of policies, geography, institutions⁶⁹), together with a broad agreement on the endogeneity of institutions and growth⁷⁰.

⁶⁵ This is analysed more in depth in Sindzingre (2005).

⁶⁶ Rodrik in the introduction of Rodrik (2003).

⁶⁷ Cosmides and Tooby (1994).

⁶⁸ Among the few studies that criticise the lack of rigour in the use of institutional variables in econometric regressions, Lindauer and Pritchett (2002); see also Sindzingre (2005).

⁶⁹ Among a vast literature, Rodrik et al; (2002), Acemoglu et al. (2004).

⁷⁰ Przeworski (2003).

3. Institutions and norms as generating both exclusion *and* cooperation

The ex ante indeterminacy of institutions and norms

The effects of institutional dimensions on the various dimensions of poverty – reducing or aggravating – are difficult to determine *ex ante*. They depend on contexts, on whether externalities are present (network externalities, for example). As noted by Schlicht in regard to the concept of custom, institutions and norms cannot be said *ex ante* to be detrimental or optimal, to hinder or enable production and coordination⁷¹.

Amidst the large literature on the relationships between institutions and growth, many studies emphasise the fact that economic outcomes of institutions cannot be predicted with certainty. ‘Institutions matter’, but there is no certainty as to which institution matter for growth. No institution in particular seems necessary for growth and whatever the context many different institutions exhibit analogous functions. Transformation and adaptability appear to be more important ingredients for growth⁷². It may even be that institutions *per se* do not matter: only institutional performance matters⁷³. For example, the same institutions that generate poverty may be exploited for escaping poverty. Households may diversify their source of income in relying on the same traditional institutions, for instance using demographic (large households) and migratory strategies, adapting tenure arrangements, choices of crops⁷⁴, or diversifying via trade with members of networks who enjoy higher non farm incomes⁷⁵.

Institutions and norms may be causes of exclusion, segmentation and poverty; but social norms and institutions also foster inclusion. They are inclusive-exclusionary devices that function both in subjective and objective terms (inducing subjective and objective differentials of information, subjective and objective deprivation of rights). Social norms that define and regulate group memberships may limit social mobility, but help to increase income or welfare of group members. Inclusive or exclusionary outcomes of a given social institution are uneasy to determine *ex ante*, as they depend on individual or group characteristics. In particular, the social heterogeneity of the poor may prevent collective action and thus their demand for the provision of public goods⁷⁶. Studies of collective action problems show that degrees of cooperation may vary enormously depending on contextual conditions (economic, demographic, institutional, individual): collective and cooperative behaviour depend on combinations of conditions that exhibit uncertain outcomes, such as the fact that rules are effectively shared, credible and binding⁷⁷.

The institutions that regulate group memberships via various criteria, kin, ethnicity, occupation, or territory, are particularly pertinent in terms of impact on poverty. They often exhibit significant enforcement capacity (compliance with the obligations and rights associated to these institutions even signals membership). In the ‘weak states’ of some developing countries, group membership is often more relevant than state allegiance. Poverty and exclusion—particularly in rural areas—may be determined by membership institutions, which may rely on individual characteristics (for example physical), birth criteria, gender, age, and occupation, and create statuses, castes, and so on. Group membership may be a constraint on the access to resources

⁷¹ Schlicht (2001).

⁷² Engerman and Sokoloff (2003).

⁷³ Pritchett (2002).

⁷⁴ Hilhorst et al. (1999) on the example of Mali.

⁷⁵ Mwabu and Thorbecke (2004).

⁷⁶ As argued in the case of India; on caste and collective action in India, see Banerjee and Somanathan (2001).

⁷⁷ Ostrom (2000).

even outside rural contexts, such as access to credit⁷⁸, but group boundaries work as assets and devices facilitating trust, punishment of free riding, and access to capital⁷⁹. Sharing and altruism, however, may stop at the borders of group memberships, lineages, and networks (the ‘we’). Non members are excluded from assistance and mutual insurance⁸⁰.

This is where state institutions—and political institutions such as democracy—may be more welfare-enhancing than social institutions, in creating not group members but citizens via norms of equality. Boundaries are extended beyond groups to that of the state boundaries and with altruistic norms extending beyond a limited number of individuals (e.g. kin) to the ensemble of the citizenry. But state institutions also generate inequality among citizens, even in democracies if these institutions are mostly reduced to institutional forms. Political exclusion is indeed a major cause of poverty. For example in Sub-Saharan Africa weak state institutions make it so that political regimes are associated with privileged access to resources and redistribution to specific groups that are close to rulers, together with the exclusion of regions or groups that are considered to be political threats⁸¹.

Cooperation, reciprocity, and altruism as evolutionary outcomes

Cooperation and cooperative social norms are also outcomes of repeated interactions. Rational choice theories do not fully explain cooperative behaviour, and cooperation and commitment to the goals of a group may be Pareto-optimal compared with non-cooperative games⁸². Evolution even seems to favour conventions that are efficient and egalitarian⁸³. In repeated interactions, cooperation may arise as a rational outcome, as individuals may expect future benefits from their action⁸⁴. In their behaviour individuals take into account the fact that this generates a future reaction by others. If interactions are repeated and individuals value future payoffs more than current ones, this induces cooperative outcomes and the emergence of habits. Cooperative social norms may also be stable outcomes of the evolution of societies that face problems of management of commonly-owned renewable resources: societies may select individuals who prefer collective activity, with cooperative norms therefore being internalised⁸⁵.

Experimental economics approaches confirm that humans possess the desire to reciprocate, to avoid social disapproval and to be fair⁸⁶ (fairness being defined as self-centred inequity aversion). Evolutionary games show that individuals may be less motivated by self-interest than by other-regarding behaviour and altruism, which may result in altruistic norms, even if there are no repeated social interactions (status quo bias and influence of the past may, however, shape individuals’ notion of fairness⁸⁷). The various motives of individual behaviour (fairness, selfishness, cooperation, competition) interact with the economic environment according to the proportions of types of players, which give rise to different equilibria⁸⁸.

Reciprocity as responding to a hostile or prohibited action (punishment) may likewise bring no benefit to the individual who achieve it but may be a benefit for the survival of its membership

⁷⁸ As shown by Fafchamps (2000) on the case of supplier credit for manufacturers in Kenya and Zimbabwe.

⁷⁹ On the concept of social exclusion, Sindzingre (1999).

⁸⁰ Goldstein et al. (2002) on the example of Southern Ghana.

⁸¹ Kanyinga (2004).

⁸² Sugden (2000), Harp (2005).

⁸³ Young (1998).

⁸⁴ Kreps et al. (1982).

⁸⁵ Sethi and Somanathan (1996).

⁸⁶ Fehr and Fischbacher (2004), Fehr and Falk (2001).

⁸⁷ Rabin (1993).

⁸⁸ Fehr and Schmidt (1999).

group. Reciprocal behaviour, however, differs from altruism. Altruism may be defined as unconditional, thus differing from cooperation (no expectation) and reciprocity (altruism is not a response). Experimental economics show that reciprocity is more resilient when reciprocating another individual's behaviour that is itself perceived as negative rather than positive⁸⁹. Reciprocity differs from the cooperation (or 'retaliation') found in repeated interactions: reciprocity is defined by responding to friendly behaviour in a more friendly way than predicted by the self-interest model ('positive reciprocity'), and responding to hostile behaviour in a more nasty way ('negative reciprocity'), even if reciprocity involves strangers, involves no reward, and is a costly one-shot game. The reciprocity model seems to be pre-eminent over the self-interest model (i.e. individuals punish free-riders even if the punishment is costly for the punisher). For experimental economics, this dominance of reciprocal behaviour entails cooperation and reinforces collective action and social norms. Specific characteristics of the institutional environment determine whether the self-interested or reciprocal behaviour will prevail, in particular the existence of incomplete contracts or punishment costs⁹⁰.

Equally, altruism may be an evolutionary outcome of interactions and competition between human groups. Bowles thus makes the distinction between reciprocal altruism, kin altruism (with the expectation of a future reciprocal benefit), unconditional altruism and strong reciprocity (punishment of violators of norms even if there is no interest⁹¹). Evolutionary psychology and games therefore highlight the endogeneity of social preferences: because of evolution, social norms include punishment of perceived free-riders and exclusion as well as altruism, more than would an anonymous market.

Cooperation, however, may be a form of self-interest. Cooperation may be based on the social norm of conditional cooperation: i.e. cooperation if the others cooperate. 'Other-regarding' behaviour, 'prosocial' behaviour⁹², altruism or reciprocal behaviour may be the expressions of incentives as well as individual characteristics.

Indeed, the boundaries between categories of non self-interested behaviour are difficult to delineate: they are endogenous to group memberships and the associated social norms; they are both causes and effects of them. In traditional societies, cooperative, reciprocal and altruistic behaviour may apply to individuals who are intergenerationally related to a given individual (for example altruism with a friend's lineage members).

For evolutionary psychology, the detection and exclusion of cheaters show that some degree of ethics appears to be ingrained in social relationships. Indeed, ethical norms appear to be a normative device that is a requisite for social exchanges in any society, a condition for social interaction, even if norms are transgressed or limited to very small number of members (for instance the close kin). The very fact of entering into an exchange or communication with another individual supposes she is an addressee who is another individual (not, say, a thing). The 'cooperation principle', as coined by the philosopher H. Paul Grice⁹³, is a condition of social interaction and may be viewed as implying an ethical and other-regarding principle. Any act of conversational exchange implies some intention of relevance, and the assumption that the other recognises this intention⁹⁴. Other-regarding reasoning may even be viewed as the general case: the 'team-directed' reasoning coined by Sugden explains problems such as the 'footballer's problem' better than individual-directed reasoning. Individual-directed reasoning may just be a case where the 'team' has only one member⁹⁵. As shown by Seabright⁹⁶,

⁸⁹ Offerman (2002).

⁹⁰ Fehr and Gächter (2000).

⁹¹ Among many studies, Bowles (2004b).

⁹² As coined by Benabou and Tirole (2004b).

⁹³ Grice (1975).

⁹⁴ Sindingre (1987).

⁹⁵ Sugden (2000).

institutions built themselves on the evolution of psychology, which is inherited from hunter-gatherers societies that were based on rules such as division of labour and thus cooperation - 'dealing with strangers'.

4. Institutional mechanisms underlying the multidimensionality of poverty: from institutions to poverty, from poverty to institutions

Multidimensionality is a dynamic phenomenon. Two types of feedbacks and causalities may be distinguished: from income poverty to institutions and from institutions to poverty, which both operate at the macro and the micro levels. Causalities do not lead only from institutions to income poverty, but also to the other dimensions of poverty, such as health and education. For example, exclusionary norms obviously impact on education and health⁹⁷.

From institutions to poverty

The line of causality from institutions to poverty is the object of many studies. In the first place, state institutions may be key determinants of poverty for individuals and groups. In the case of extreme forms of poverty, state legal apparatus may institutionalise destitution. As coined by Harris-White regarding the case of groups of beggars in India, for certain groups the state may institutionalise situations of 'having nothing, being nothing and having no political rights'⁹⁸.

State institutions guaranteeing the rule of law for the poor may exist, but their form may be empty, or filled by contents that diverge from their purposes. Their credibility for the poor may be weak, for example the way they sanction non-compliance. Yet rules enforcement is a condition so that institutions may be credible and efficient in terms of addressing poverty (as shown, in resource management)⁹⁹. Similar state institutions may likewise have different impacts on poverty in different contexts if the similarity refers only to their forms: accountability vis-à-vis the poor and capacity of collective action of the poor in enforcing their rights may differ¹⁰⁰. At the aggregate level, cross-country regressions show that the rule of law has a positive effect on income levels, and that rule of law and democracy reinforce themselves¹⁰¹.

Institutions regulating labour markets also have an impact on poverty levels. For example, among the various channels that link growth and poverty, the variation in the levels and sectors of employment is one of the most significant in terms of impact on poverty. Institutions influence the opportunities for participating in labour markets, and the channelling of labour force participation bias the impact of growth¹⁰².

Rural institutions are likewise crucial in the causal relationship between institutions and poverty. Differences in terms of growth of the agricultural sector in Sub-Saharan Africa and Asia have been explained by differences in population densities, through short-term economic effects, but also by the long-term effects on norms (through effects on social and family norms). These differences have also been explained by patterns of access to land (more abundant land

⁹⁶ Seabright (2004).

⁹⁷ Kozel (2003) on the case of India.

⁹⁸ Harris-White (2005).

⁹⁹ As shown by Gibson et al. (2005) on the example of forests.

¹⁰⁰ De Haan (2004) on the example of the state of Orissa and the difference of impact on poverty of similar institutions according to the location.

¹⁰¹ Rigobon and Rodrik (2004).

¹⁰² Warner (2004) on Thailand and Mauritius.

resources relative to population and labour force in Africa than in Asia) and land tenure (more communal and based on land use in Africa than in Asia, extensive agriculture). These norms were in turn less efficient in Africa for preventing the degradation of resources¹⁰³. The difference between ‘poverty in men’ (a low labour-land ratio) compared with ‘poverty in resources’ has long been a major analytical distinction characterising Sub-Saharan Africa, as shown by Iliffe¹⁰⁴. This ‘poverty-geography-demography-institutions’ nexus has explained the difficulties of state formation¹⁰⁵, the use of kin as risk mitigating, insurance and distributive devices, and norms favouring high fertility at the expense of children’s quality in terms of health and education.

The shaping of poverty by social norms limits the room for state intervention. Social institutions change slowly. Certain institutions persist even though they are inefficient or perpetuate income poverty for particular groups. Individual beliefs may be resilient: even in changing contexts, individuals may consider rural traditional institutions as more relevant than the state legal system, though the latter may provide opportunities for escaping poverty and be more equalising than traditional norms. Rural poverty is indeed shaped by the coexistence of market and non market institutions, which create externalities (for example, the possibility to participate or not in markets or in institutions that help escaping poverty). Rural poverty is also shaped by ‘missing markets’, which not only result from market conditions but also from institutional environments. This combination of institutions is dynamic, with incentives provided by markets combining with those provided by other institutions. In rural contexts, markets are not only missing but also interlinked. The interlinking of markets limits the opportunities they offer, which is compounded by social norms: agricultural contracts may be locking-in devices if associated with social statuses, even if they are favourable in terms of income.

Neoinstitutionalist views that equate institutions and property rights do not fully explain the impact of institutions on poverty, especially for rural institutions in regions such as sub-Saharan Africa. The distinction between ‘formal’ and ‘informal’ does not correspond to empirical facts and cognitive mechanisms¹⁰⁶. Rural institutions may be defined by many types of rights other than property rights, for example rights governing land and resource tenure rights, ‘secondary’ or ‘derived’ rights, such as rights of access, of temporary or permanent use, and of temporary transfer as distinct from permanent transfer¹⁰⁷. In oral societies in particular, institutions are shaped by history; they are flexible and the result of negotiations¹⁰⁸. The establishment or titling of private property rights may trigger ownership and distributive conflicts¹⁰⁹. Depending on the historical, social, and political environment, flexibility and negotiability of rights may mean inequality, exclusion and expropriation. Another limit of defining institutions via property rights is the latter’s endogeneity, heterogeneity and the absence of linear relationships with growth. Property rights and the ownership of assets are endogenous (to returns to assets and policies¹¹⁰). A further limitation is the linkages of property rights with other institutions in a given setting. The varieties of rights associated with a particular good by definition require other institutions to be recognised, i.e., other social contracts, agreements, and legitimacy¹¹¹. It is also other

¹⁰³ Platteau and Hayami (1998), Ali and Thorbecke (1997).

¹⁰⁴ Iliffe (1987).

¹⁰⁵ Herbst (2000).

¹⁰⁶ The limits of the formal-informal distinction are examined in Sindzingre (forthcoming).

¹⁰⁷ On the various modalities and rights of access to resources and land in Sub-Saharan Africa, Berry (1989), Lambert and Sindzingre (1995), Lavigne-Delville et al. (2001), Chauveau (2000).

¹⁰⁸ Berry (1993); Berry (1997) on the example of Asante in Ghana, Shipton and Goheen (1992).

¹⁰⁹ Platteau (1996).

¹¹⁰ See Robinson (2000) on the example of Latin America.

¹¹¹ Sjaastad and Bromley (1997), Lund (nd).

institutions—political institutions and power relationships—, which make it so that a right can be claimed and exercised, or, on the contrary, denied.

Household institutions also typically generate poverty. In developing countries the model of the household tends to be collective rather than unitary. Types of productive activities, management of collective goods and commons, intrahousehold resource allocation, use of profits, accounts, types of expenditure and consumption (for example on food or education) are organised by social rules, which differentiate individuals according to age, gender, physical condition, extrahousehold norms (social status, and so on). Poverty may be generated via the social norms that organise risk-sharing, mutual insurance, redistribution, transfers and loans (functioning as quasi-credit)¹¹². These norms may be efficient devices of risk-pooling in the case of shocks affecting individuals or groups, but they also create unequal access to opportunities and resources¹¹³. They are also subject to problems of imperfect information and enforcement in case of opportunist behaviour, as enforcement relies on trust that stems from repeated exchanges. These norms smooth income shocks, but because the norms often rely on group membership they exclude from social protection non-members and individuals who are socially isolated for demographic or other reasons. Institutions—or lack of access to them—thus may induce vulnerability, exposure to risks of income shocks and lack of access to consumption-smoothing mechanisms¹¹⁴.

Market institutions, however, may erode the equalising and solidarity mechanisms of non market norms, due to mobility, the increase in short term transactions and the weakening of reputation effects and control of free-riding allowed by repeated interactions in small groups¹¹⁵, particularly in Sub-Saharan Africa¹¹⁶. It has been argued that in Sub-Saharan Africa historical events such as colonisation accentuated the erosion of intra-lineage and intra-household norms of cooperation and the mechanisms of fragmentation between them¹¹⁷.

From poverty to institutions

At the aggregate level, lines of causality from poverty to institutions are generally inferred from growth cross-country regressions¹¹⁸. The latter may show a positive—though not strong—effect, from income levels to institutions (high income being associated with better institutions)¹¹⁹. A significant effect of income levels on institutions operates through the political economy channel: from aggregate poverty to specific types of political institutions, for example democracy and participative institutions. There is, for example, a controversy over the fact that poverty, or low levels of literacy, could prevent the well-functioning of democratic institutions (as in Sub-Saharan Africa). Poverty could also favour the capture of institutions by patronage strategies.

At the micro level, poverty determines the access to institutions and therefore their nature and effectiveness: as argued by Zimmerman and Carter, the rich have access to markets and institutions, especially financial institutions (credit) and may acquire portfolios with high

¹¹² Dercon (2004), Fafchamps and Lund (2003) on the example of the Philippines.

¹¹³ On the example of Côte d'Ivoire, Duflo and Udry (2003).

¹¹⁴ Examples may be lack of access to mutual insurance or formal financial institutions; vulnerability is analysed by Morduch (1994), who also employs the term 'stochastic poverty'.

¹¹⁵ Arnott and Stiglitz (1991), Dasgupta (2003).

¹¹⁶ As shown by Platteau (2002).

¹¹⁷ Leeson (2005).

¹¹⁸ As a typical study, e.g., Barro (1997).

¹¹⁹ Rigobon and Rodrik (2004).

returns. In contrast, the poor are limited to portfolio with lower risks and lower returns, and they are constrained to smooth their assets rather than their consumption¹²⁰.

In poor small scale-economies, poverty *per se* may perpetuate norms and institutions though they may be inefficient, such as rural traditional arrangements (risk-sharing, insurance)¹²¹. There are thresholds of collective poverty under which redistributive social norms are inefficient (preventing savings and accumulation) or insufficient in case of covariate risks (natural disasters). The scope for customary exchanges may remain narrow and prevent the development of markets¹²². The capacity to enforce rules, punish and limit free-riding may be confined to members of networks. In the contexts of social segmentarity and fragmentation (as often in sub-Saharan Africa), the scope of networks can be short and with little transitivity of trust and shared norms. These institutional characteristics contrast with other regions, such as East Asia where large international trade networks have been associated with extensive trust and reputational mechanisms that have facilitated credit, capital mobility and investment¹²³.

Poverty *per se* may have a detrimental impact on collective action. As shown by Bowles, the poor have difficulties in implementing large-scale coordinated collective action aiming at more equal institutions, because they lack information more than do others¹²⁴. The poor are by definition more deprived in all assets than others. Moreover they do not form a homogenous group: there is no fixed set of necessary and sufficient criteria, nor affiliations to specific institutions which would constitute the poor as a 'natural' group.

Endogenous processes and poverty traps generated by institutions and norms

Dimensions are endogenous to each other—income, health, employment, social relationships, status, and the norms that regulate them—, and according to intergenerational dynamics¹²⁵. Institutions create specific endogenous processes: in particular, they shape positive or negative feedbacks, poverty traps or virtuous paths out of poverty. For example, the cumulating of all dimensions in the same direction—low income, low education, institutional exclusion—build poverty traps.

Multidimensionality implies thresholds and non linearities between the different dimensions of poverty. Institutions contribute to this aspect of multidimensionality, because their own composite character generates threshold effects, depending on their effective content, degree of internalisation, and the presence of other institutions. Depending on contexts (on other political, economic, social institutions), the same form of a given institution can aggravate or attenuate poverty. The presence of courts, for example, may help or lock-in the poor in their state of poverty, depending on whether formal legal institutions are linked to accountable or predatory regimes¹²⁶.

Membership norms may be at the foundation of poverty traps¹²⁷. Location is also an element of the self-reinforcing traps created by memberships. Institutions thus may induce self-reinforcing dynamics that generate stable poverty traps: for example, high levels of predatory politics, corruption or social conflicts that stabilise expectations of future corruption and conflicts, all being both causes and effects of low income. In a relative poverty-social exclusion perspective *à la* Atkinson and Bourguignon (also focusing on the causal priority of dimensions), institutions

¹²⁰ Zimmerman and Carter (2003).

¹²¹ Platteau (1997, 2000).

¹²² Platteau (1994), Fafchamps (1992) on the contrast between 'traditional' and market societies.

¹²³ Malaizé and Sindzingre (1998), Rauch (2001).

¹²⁴ Bowles (2004a).

¹²⁵ Dasgupta (1997).

¹²⁶ Sindzingre (2004).

¹²⁷ Durlauf (2002).

may be pre-eminent when they are little affected by markets outcomes, such as social norms creating memberships by birth¹²⁸. Dimensions of poverty, however, do not necessarily evolve in the same direction: the status of women may be an example, as in Sub-Saharan Africa (being sometimes wealthier because of their trading activities, but suffering lower rights in the household and social life).

The concept of coordination failures causing multiple equilibria and poverty traps was analysed long ago, for example by Rosenstein-Rodan¹²⁹, as were concepts of cumulative causation and locking-in created by particular economic structures¹³⁰, or increasing returns and network externalities creating lock-in and path dependence phenomena¹³¹. Multiple equilibria and paths may result from minor chance events. The concept of the poverty trap has been recently reactivated¹³² with the notion of ‘institutional poverty traps’, defined by Bowles as institutions ‘that implement highly unequal divisions of the social product’ and widespread poverty, and which persist over long periods of time despite their lack of efficiency vis-à-vis egalitarian institutions¹³³. For Bowles, institutional poverty traps may be explained as outcomes of uncoordinated actions of the members of a group, because they are self-enforcing and because the poor have difficulties in coordinating the modes of collective action that could transform an unequal set of institutions into a more equal one. Institutional poverty traps and coordination failures are also created by network effects, which in turn reinforces the resilience of social institutions within market economies (such as traditional kinship institutions), as shown by Hoff and Sen¹³⁴.

The concept of the poverty trap, however, has been recently criticised as lacking empirical evidence when defined as zero growth for poor countries¹³⁵. There is, however, broad agreement over the fact that, if economic factors (initial income or savings) perhaps do not create poverty traps, institutions do (‘governance’ for Kraay, democratic institutions and economic freedom for Easterly): institutions are at least associated with divergences between rich and poor countries.

Political economy contributes to the formation of poverty traps. If there is a consensus that ‘institutions matter’, the ways they matter depend on the political environment as well as the economic one¹³⁶. Institutions may provide incentives for coordination, but institutions are obviously shaped by the power relationships that generate them, maintain them and determine access to them. Power relationships set up the initial conditions of rights, the capacity to claim rights, determine the distribution of rights, and the economic outcome of this distribution. Institutions in highly unequal or polarised societies determine access to the satisfaction of basic needs—subsistence, health—a well as to the other dimensions of poverty, such as social inclusion¹³⁷. Political institutions are endogenous to existing balances of power, which makes it so that the implementation of ‘rule of law’ or democracy do not necessarily imply conditions that are favourable to the poor and more egalitarian. Political institutions may be entirely ‘captured’ by particular interest groups and elites in power, for instance, the rule of law and property rights devised in order to maintain the status quo. Institutions create distributive conflicts and are simultaneously outcomes of them. As argued by Engerman and Sokoloff regarding divergences in income, growth and inequality in Latin American countries, in some

¹²⁸ See for example the analysis of rituals in the caste system by Louis Dumont: social orders may be reversed, but there are cardinal values that are pre-eminent in fine on ordinal values.

¹²⁹ Rosenstein-Rodan (1943).

¹³⁰ For example by Nicholas Kaldor.

¹³¹ Arthur (1989); a review is in David (2000).

¹³² Hoff (2000).

¹³³ Bowles (2004a, p.2).

¹³⁴ Hoff and Sen (2004).

¹³⁵ Easterly (2005), Kraay (2005).

¹³⁶ Engerman and Sokoloff (2003).

¹³⁷ Zhang and Kanbur (2001).

countries the elites institutionalised rules, laws, and policies that gave them strong advantages; these institutions in turn contributed to the resilience of inequality¹³⁸.

‘Cognitive institutional traps’: from mental representations to norms, to poverty and back to norms and representations

The cognitive approach of institutions has enriched the analysis of the endogeneity between institutions and economic outcomes, in endogeneising beliefs, preferences, behaviour, economic and social interactions and the environment. As shown by Bowles, economic institutions such as markets influence the structure of social interactions, which in turn influence norms and preferences¹³⁹. Social interactions may lead to feedbacks and increasing returns that generate multiple stable equilibria and lock-in effects, virtuous circles and poverty traps. Various events and shocks may generate ‘equilibrium selection’ and transitions—with some being dramatic (punctuated equilibria). Evolutionary dynamics make some equilibria more robust and others inaccessible. In an ‘other-regarding’ approach, institutions are resilient as long as individuals have an interest in their adherence, which is influenced by and endogenous to the fact that others do the same¹⁴⁰.

It is argued here that the role of the institutions in the multidimensionality of poverty is a phenomenon that is stabilised by cognitive mechanisms. A comprehensive understanding of the multidimensionality of poverty conceives institutions as cognitive phenomena that in turn generate institutions, which generate poverty in its different dimensions. Two types of causal processes may be distinguished, which are complementary.

In the first place, poverty is shaped by norms, as norms are psychological states, mental representations, and cognitive routines, which may make learning processes costly for individuals. This generates path-dependency and persistent differentiation in mental models and behavioural rules¹⁴¹. This has been coined as ‘cognitive traps’¹⁴². Because they are themselves composite phenomena, institutions multiply the causal paths. Beyond subsistence, poverty is shaped by individual mental representations and norms, which impact on the other dimensions, for example, perceptions of having no right to claim rights, of being confined to a lower status, of having no prospects of social mobility, and the like. Prospects greatly contribute to differences in assessments by individuals of their poverty: if individuals perceive their society as enjoying high social mobility, the fact that they are poor does not imply for them that they will be poor in the future¹⁴³. Individuals perceive their level of poverty depending on whether or not they believe in a ‘just world’ and that individual effort determines income, with these beliefs in turn influencing institutions¹⁴⁴.

The literature on subjective economic welfare confirms the importance of subjective perceptions, as well as the dissonance between objective poverty and subjective perceptions of poverty. Even if there is a strong relationship between both indicators, poverty is also a psychological representation, such as the feeling that one is poor. The latter depends on income, health, education, and employment, but also on the resources of others (relative poverty), the perceptions of the other’s perceptions, and on expectations as to future welfare, i.e. the perceptions of social mobility prospects offered by a society. There may be a non-linear

¹³⁸ Engerman and Sokoloff (2002).

¹³⁹ Bowles (1998).

¹⁴⁰ As analysed in depth in Bowles (2004b).

¹⁴¹ Denzau and North (1994).

¹⁴² Egidi and Narduzzo (1997), in an experimental economics approach.

¹⁴³ See Alesina and La Ferrara (2001) on the case of the US; Alesina et al. (2001).

¹⁴⁴ See Benabou and Tirole (2004a), Alesina and Angeletos (2003).

relationship (diminishing returns of income) between a dimension of poverty such as 'empowerment' and better economic welfare¹⁴⁵.

Beliefs and preferences shape norms, which in turn shape economic outcomes. Examples of this are individual preferences regarding identity: they may use pre-existing institutions such as ethnic memberships, as shown by the fluidity of affiliations that stem from individual strategies in Sub-Saharan Africa or elsewhere - for example, via hypergamic alliance strategies of lower status groups vis-à-vis upper groups, or changes in lineage or ethnic affiliations according to preferences regarding alliance, location, or occupation¹⁴⁶.

The multiple equilibria and endogenous effects that were highlighted by Rosenstein-Rodan at the aggregate levels of economic sectors likewise characterise social interactions between individuals. Multiple equilibria result from the beliefs that individuals have about what others will do within given membership groups. As shown by Brock and Durlauf, incentives to behave similarly to others may lead to multiple equilibria and discontinuities ('phase transitions'¹⁴⁷). Group membership implies the attribution of characteristics to an individual by other members of a society (for example, prejudices) as well as their possible internalisation by the recipient. Beliefs thus perpetuate poverty, as shown by Loury in the case of African-Americans¹⁴⁸: the social and normative construction of race induces an ingrained stigma and inhibiting effects on individuals. These beliefs appear difficult to revise. Cognitive mechanisms make it so that individuals tend to deny that these beliefs may be biased, as in the case of social discrimination¹⁴⁹.

Poverty is maintained by mental representations that perpetuate poverty because these perpetuate powerlessness. The poor may not even consider institutions that could help them escape poverty. These institutions may be cognitively irrelevant. The poor lack incentives to claim their rights (because of asymmetries of information¹⁵⁰ and lack of bargaining power). They lack incentives to participate in the market institutions (for example, financial) and in the political institutions that could help them escape poverty, and they lack the incentive to save, which in turn generates poverty traps and polarised societies¹⁵¹. These mechanisms work intergenerationally: the poor not only lack incentives to escape poverty but also transmit this lack of incentives to their children (their main assets), who will themselves lack the incentives, education or health that could incite them to participate in institutions or claim their rights¹⁵². Trust in institutions is a condition for the functioning of institutions, while in an endogenous way well-functioning institutions create trust in others and reinforce other-regarding behaviour. Though trust may be based on other motivations that depend on contexts (survival strategies, creating social bonds¹⁵³), trust is a psychological state and is based on expectations that the others are worthy of trust or are altruistic.

Secondly, poverty is shaped by norms and institutions, as they shape mental representations and behaviour, in regard to individual status in particular, which builds cumulative causation and endogenous processes. Experiments in behavioural economics show that institutional characteristics of markets (for example, anonymity and competition) shape individuals' social

¹⁴⁵ As shown by Ravallion and Lokshin (2002) on the example of the discrepancies between objective income and self-rated welfare in Russia.

¹⁴⁶ And even in the US in the 19th century, as shown by Bodenhorn and Ruebeck (2003) on the endogeneity of the choices of racial identity and tradeoffs between their costs and benefits.

¹⁴⁷ Brock and Durlauf (2005).

¹⁴⁸ Loury (2001).

¹⁴⁹ Because of 'cognitive inaccessibility': see the survey of neuroeconomics by Camerer et al. (2005).

¹⁵⁰ Bowles (2004a).

¹⁵¹ Mookherjee and Ray (2000).

¹⁵² Dasgupta (1997).

¹⁵³ As shown by Barr (2003) in an experiment conducted in Zimbabwe villages.

preferences. Individuals seem to be less social in anonymous environments, the institution of the market appears to reduce the capacity to regard others, and individuals are more social in environments of personal exchanges¹⁵⁴.

Institutions and norms generate mental processes and expectations that in turn maintain institutions. For instance, as shown by Hoff and Pandey in the case of caste¹⁵⁵, low caste individuals perform less well because they expect lower rewards; they think that they do not fully participate in certain institutions and that they will not have full access to the rights and rewards provided by these institutions. A particular institutional system of inequality here generates mental representations that sustain the institutions that support inequality. Poverty traps are created by institutions, which are in turn supported by expectations.

Poverty is also shaped by political institutions that generate specific mental representations. For example, political institutions may intensify individual quests for identity¹⁵⁶. As Glaeser argues, political institutions likewise provide incentives for true or false beliefs: false beliefs endure when they are costless, bringing large returns and when the incentives for true information are low¹⁵⁷. As is well-known, political institutions, divisions and fragmentation may provide the incentives for psychological states and emotions such as hatred against particular groups¹⁵⁸.

Conclusion

This paper has argued that institutions and norms are constitutive of the multidimensionality of poverty, according to a two-step causal process that is direct and involves cognitive phenomena. In the first place, institutions and norms determine access and achievements in various dimensions, in, for example, income, human development and social interactions.

Secondly, it has been shown that institutions as evolutionary cognitive phenomena play a key role in these causal processes. As psychological states, institutions and norms endogenously both determine and result from individual perceptions and mental models, and therefore are also causes and effects of social interactions and types of behaviour regarding the capacity of escaping poverty, for instance cooperation, altruism, self-interest. Institutions are themselves multidimensional, including forms and contents, which multiplies the causalities between dimensions of institutions and dimensions of poverty.

It has likewise been shown that because of these multiple cognitive causal chains, there is an ex ante indeterminacy of the effects of norms and institutions, which may be inclusive, cooperation enhancing and poverty reducing, or may be exclusionary. Causalities function both ways, from institutions to poverty and from poverty to institutions, which induce endogenous processes and may generate poverty traps, or 'institutional poverty traps'. Repeated social interactions may stabilise beliefs and norms, thus generating institutional poverty traps that are also cognitive institutional traps.

In the analysis conducted in this paper, concepts from development economics, evolutionary institutionalism and psychology have been used. The bridging of these disciplines is an increasingly promising field of research, in particular regarding the concepts of norms and institutions. This cross-conceptualisation should contribute to a better understanding of the multidimensionality of poverty.

¹⁵⁴ Carpenter (2005), Cardenas and Carpenter (2005).

¹⁵⁵ Hoff and Pandey (2003).

¹⁵⁶ For example ethnic identity, see Posner (nd) on the example of Kenya.

¹⁵⁷ Glaeser (2003).

¹⁵⁸ Glaeser (2004).

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